

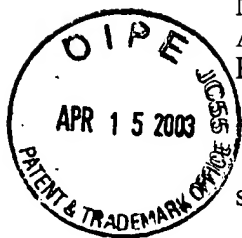
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PATENT

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Application No.: 09/637,844
Page 2

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a second substrate having a surface, said first substrate and said second substrate being aligned such that said surface of said first substrate opposes said surface of said second substrate;

a first organic layer attached to said surface of said first substrate, said organic layer comprises said carboxylic acid which interacts with said inorganic ion;

a mesogenic layer between said first substrate and said second substrate, said mesogenic layer comprising a plurality of mesogens, wherein at least a portion of said plurality of mesogens undergo a detectable switch in orientation upon ionic bonding between said carboxylic acid and said inorganic ion, whereby said presence of said inorganic ion is detected.

115. (New) The device of claim 114, wherein said first surface and said second surface comprise a layer of gold.

116. (New) The device of claim 115, wherein said organic layer is 11-mercaptoundecanoic acid.

117. (New) The device of claim 116, wherein said mesogenic layer is 4-cyano-4-pentylbiphenyl.

REMARKS

Claims 66-89 and 109-117 are pending in the present application.

New claims 114-117 are added. Support for claim 114 is located in Example 1 on page 59, line 33, page 60, lines 1-12, and Example 4 on page 71. Support for claims 115 and 116 are located in Example 4 on page 71, lines 8-14. Support for claim 117 is located on page 75, lines 20-23.

Applicants have presented claims that are similar in scope to the claims that were examined. The new claims are neither outside of the Group originally elected, nor are they inconsistent with the election of species.

No new matter has been added in the new claims.